

Net-Zero Farming and Freight Facility Demonstration Project

Through this project, five zero emission, all electric battery class 7 trucks with all-electric transport refrigeration units (eTRUs) will be delivered to the main demonstration site, Moonlight Companies in Reedley, California. The eTRUs will operate 100 percent of the time within a Disadvantaged Community based on CalEnviroScreen 3.0. Project Clean Air, Inc., as the lead applicant, has partnered with HummingbirdEV, Moonlight Companies, California Transport Refrigeration, Inc., Thermo King and TruthTech Consulting to create the Net-Zero Farming and Freight Facility Demonstration Project.



The Net-Zero Farming and Freight Facility Demonstration Project has been conceived and developed by all of these partners with a great amount of support from the agriculture industry, public health officials, educators and clean air advocates. The project partners have a great amount of advanced technology experience to oversee and ensure the success of this demonstration. Each of the project partners are taking a leading role in providing replicable clean advanced technology medium and heavy duty trucks that can have immediate positive impacts through adoption by agricultural freight movement throughout the Central Valley.

Dates: March 2019 – Summer 2021

Grantee: Project Clean Air, Inc.

Partners: HummingbirdEV, Moonlight Companies,

California Transport Refrigeration, Inc., Thermo King, and TruthTech Consulting

Grant Amount:

CARB Contribution: \$3,283,735 Matching Funds: \$3,283,735 Project Total: \$6,567,470





Vehicles/Equipment Funded

The Demonstrated Technologies include the electrification of class 7 trucks and TRUs.

- Five Class 7 single trucks will be designed & developed as full battery electric for Ag Fruit Freight Transport.
- Five TRU boxes will be purpose-built as battery electric eTRUs specifically for Fruit Transport between packing and cold storage warehouse facilities.
- Each Class 7 eTruck will receive an eTRU to serve as a complete Zero Emissions refrigerated transport unit truck to serve the "First 5 to 15 miles" of agriculture freight movement to market.

The Project Goals Include

- Customize, manufacture, and deploy five all-electric class 7, single vehicle, trucks and eTRUs.
- Demonstrate the functionality and GHG Emissions Reductions of the electric fleet, specifically in Disadvantaged Communities
- Create a market for all-electric heavy-duty TRUs in the agriculture and freight industries by improving existing technology.

Status Updates

• Contract kick-off is anticipated April 2019.









